

INTERNATIONAL SEARCH REPORT

International Application No

EP/GB2004/003451

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A63B71/10 A63B33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A63B A61F A63C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93/19814 A (ALPHAX CO LTD ; NITTA YUKUO (JP)) 14 October 1993 (1993-10-14) abstract; figures 1-4	1-23, 34-49, 56-62
X	US 5 940 892 A (MORGAN DAVID H) 24 August 1999 (1999-08-24) column 3, line 17 - column 4, line 32; figures 1-6 ----- -/--	1, 2, 6, 7, 10-15, 18-23, 33, 35-41, 43, 44, 49, 56-58, 61-63

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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national Application No

T/GB2004/003451

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 537 687 A (GARZA JAIME) 23 July 1996 (1996-07-23) column 8, line 25 - column 9, line 24; figures 7-10 -----	24-49, 56-63
X	US 5 581 822 A (TAGYO AKIKO) 10 December 1996 (1996-12-10) column 2, line 6 - line 67; figures 1-3 -----	50-63
X	US 5 777 712 A (SANSALONE SALVATORE N) 7 July 1998 (1998-07-07) column 3, line 50 - column 5, line 42; figures 1-6 -----	50-63
X	US 2002/071093 A1 (PIEROTTI ELIZABETH M) 13 June 2002 (2002-06-13) paragraphs '0024!, '0025!, '0028!; figure 5 -----	50-57
A	US 4 649 908 A (GHALY MAURICE S) 17 March 1987 (1987-03-17) the whole document -----	1,24

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International Application No

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9319814	A	14-10-1993	JP	6015015 A	25-01-1994
			AU	2955992 A	08-11-1993
			WO	9319814 A1	14-10-1993
US 5940892	A	24-08-1999	NONE		
US 5537687	A	23-07-1996	CA	2118185 A1	16-04-1995
US 5581822	A	10-12-1996	NONE		
US 5777712	A	07-07-1998	US	5502515 A	26-03-1996
			US	5204700 A	20-04-1993
			AU	8855591 A	26-05-1992
			CA	2122607 A1	14-05-1992
			WO	9207630 A1	14-05-1992
			EP	0610182 A1	17-08-1994
US 2002071093	A1	13-06-2002	US	6343860 B1	05-02-2002
			US	2004095551 A1	20-05-2004
			AU	8466201 A	13-03-2002
			EP	1330675 A1	30-07-2003
			WO	0219013 A1	07-03-2002
US 4649908	A	17-03-1987	NONE		